

#### NOTE:

CONTRACTOR MUST REPLACE CHILLED WATER PUMPS AND REPLACE OR INSTALL ASSOCIATED PIPING DEVICES AS LISTED:

- CHEMICAL POT FEEDER NU-CALGON 20L OR EQUAL AND ASSOCIATED SUPPORTS.
- BACKFLOW PREVENTER WATTS 1-9090T OR EQUAL.
- AIR SEPARATOR ARMSTRONG VAS-4 OR EQUAL AND ASSOCIATED SUPPORTS.
- EXPANSION TANK ARMSTRONG AX-120 OR EQUAL AND ASSOCIATED SUPPORTS.

- 2-1/2" NPT VENTURI FLOW STATION HYSpan BRI2750-40-31 OR EQUAL WITH ASSOCIATED NEEDLE VALVES. DIFFERENTIAL PRESSURE GAGE DWYER CAPSULHELIC 4280S OR EQUAL (0-80 PSID WITH BRASS CASE) WITH APPROPRIATE MOUNTING HARDWARE FOR EACH VENTURI METER. TYP. OF 2.
- DIFFERENTIAL PRESSURE GAGE DWYER CAPSULHELIC 4240S OR EQUAL. (0-40 PSID WITH BRASS CASE) WITH APPROPRIATE MOUNTING HARDWARE FOR EACH PUMP AND ASSOCIATED NEEDLE VALVES TYP. OF 2.
- BALANCING VALVE - BRASS BODY, BALL TYPE, SET FOR 120 GPM. BELL & GOSSETT CB 2-1/2" OR EQUAL. INSULATE AND LABEL.

- PRESSURE REDUCING VALVE AND PRESSURE GAGES. FACE TO BE 4" DIA. INCLUDE BRASS BODY NEEDLE VALVES. TUBING TO BE COPPER. PR VALVE TO BE ADJUSTED TO PROVIDE 5 PSI AT AHU-8, THE HIGHEST AIR HANDLIN UNIT. DWYER GONG-G04 SINGLE PRESSURE GAGE OR EQUAL. 0-60PSI OR EQUAL.

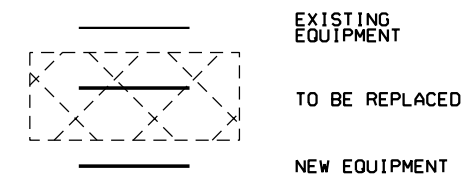
ALL PRESSURE GAGES TO BE MOUNTED ADJACENT TO DEVICE SERVED PENDING SUBMITTAL TO THE RESIDENT ENGINEER. PIPING TO EACH GAGE MUST BE MADE WITH COPPER TUBING. ALL ISOLATION VALVES MUST BE BRASS NEEDLE VALVES.

ALL DEVICES TO BE INSULATED WITH 1" ELASTOMERIC INSULATION. ARMSTRONG ARMAFLEX AP OR RUBATEX OR EQUAL.

#### NEW CHILLED WATER PUMPS EQUIPMENT SCHEDULE

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			PUMP DATA				ELECTRICAL DATA					NOTES
TAG NO.	EQUIP LOCATION	MAKE	PUMP MODEL	TYPE	PUMP GPM	HEAD. FT.	MOTOR RPM	HP	RATED VOLTS/PH/HZ	FLA AMPS	PUMP EFFIC.(MIN)	1. REUSE EXISTING MOTOR STARTER. CONTRACTOR TO RUN NEW 3*12 THWN AND 1*12 GND IN 3/4" SEALTIGHT FROM MOTOR STARTER TO PUMP SERVED.  2. REPLACE MOTOR STARTER HEATERS (EXISTING FOR 3 HP) WITH 2 HP OVERLOADS. VERIFY MAKE AND SIZE (ESTIMATED AT 8.5A). PROVIDE ONE SET OF SPARES TO THE RE.
CWP-1	MECH RM 1ST FLOOR	PACO	25709 VL	IN LINE CENTRIF	120	40	1750	2	208-230/3PH/60	7.5	73%	
CWP-2	MECH RM 1ST FLOOR	PACO	25709 VL	IN LINE CENTRIF	120	40	1750	2	208-230/3PH/60	7.5	73%	

#### LEGEND



REV		APPROVED DATE	DESCRIPTION	JCN	REDLINE DATE	APVD
DEPARTMENT OF TRANSPORTATION <b>FEDERAL AVIATION ADMINISTRATION</b> ATO - TECHNICAL OPERATIONS WESTERN SERVICE AREA						
<b>ATCT</b> <b>HILO INTERNATIONAL AIRPORT</b> <b>ATCT MODERNIZATION - MECH. RENOVATION</b> <b>NEW CHILLED WATER PUMPS CWP-1 &amp; CWP-2</b>						
HILO	SUBMITTED BY	HAWAII	HI			
REVIEWED BY	EDWARD CHAU	CLIFFORD RUSTAD	DATE	01/29/2010	JCN	415344
DESIGNED BY	EC	ENGINEERING SERVICES	DRAWING NO	ITD-D-ATCT-M016	REV	
DRAWN BY	EC	TERMINAL				
CHECKED BY	EC					